Site: Missouri Portland Cement
MOT300010303

EPA

POTENTIAL HAZARDOUS WASTE SITE
FINAL STRATEGY DETERMINATION

REGION	SITE NUMBER
VII	MOT300010303

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
Missouri Portland Cement	9403 Riverview Drive	
C. CITY	**D. STATE**	**E. ZIP CODE**
St. Louis	Missouri	63137

II. FINAL DETERMINATION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED		X			
B. REMEDIAL ACTION NEEDED, BUT NO RESOURCES AVAILABLE *(If yes, complete Section III.)*					
C. REMEDIAL ACTION *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR FINAL STRATEGY DETERMINATION

Material disposed at the site consisted of raw materials, kiln dust, and used refractory brick that contained chromium. The waste is buried, and analytical results of past sampling determined that the waste of concern was non-hazardous.

F. IF A CASE DEVELOPMENT PLAN HAS BEEN PREPARED, SPECIFY THE DATE PREPARED *(mo., day, & yr.)*	G. IF AN ENFORCEMENT CASE HAS BEEN FILED, SPECIFY THE DATE FILED *(mo., day, & yr.)*
—	—

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Greg Reesor	(913) 551-7052	3/21/90

III. REMEDIAL ACTIONS TO BE TAKEN WHEN RESOURCES BECOME AVAILABLE

List all remedial actions, such as excavation, removal, etc. to be taken as soon as resources become available. See instructions for a list of Key Words for each of the actions to be used in the spaces below. Provide an estimate of the approximate cost of the remedy.

A. REMEDIAL ACTION	B. ESTIMATED COST	C. REMARKS
	$	
	$	
	$	
	$	
	$	
	$	
	$	
	$	
	$	
D. TOTAL ESTIMATED COST	$	

EPA Form T2070-5 (10-79)

Continue On Reverse

Continued From Front

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY ACTIONS *(On Site and Off-Site)*: List all emergency actions taken or planned to bring the site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE *(mo,day,&yr)*	3. ACTION END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State, Private Party)*	5. COST	6. SPECIFY 311 OR OTHER ACTION. INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY *(On Site and Off-Site)*: List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE *(mo,day,&yr)*	3. ACTION END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State Private Party)*	5. COST	6. SPECIFY 311 OR OTHER ACTION. INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				$	
				$	
				$	
				$	
				$	
				$	

C. MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL MAN-HOURS FOR REMEDIAL ACTIVITIES	3. TOTAL COST FOR REMEDIAL ACTIVITIES
a. EPA		$
b. STATE		$
c. PRIVATE PARTIES		$
d. OTHER *(specify)*:		$

ecology and environment, inc.

CLOVERLEAF BUILDING 3, 6405 METCALF, OVERLAND PARK, KANSAS 66202, TEL. 913/432-9961

International Specialists in the Environment

MEMORANDUM

TO: Pete Culver, RPO

THRU: Philip Dula, AFITOM SPM for PD

FROM: Bob Overfelt, E & E/FIT

DATE: March 28, 1989

SUBJECT: Preliminary Assessment II of the Missouri Portland Cement (St. Louis) Site, St. Louis, Misouri
TDD #F-07-8808-029 PAN #FM00717PA
Site #V31 Project #001
Superfund Contact: Greg Reesor

INTRODUCTION

The Ecology and Environment, Inc., Field Investigationi Team (E & E/FIT) was tasked by the Region VII U.S. Environmental Protection Agency (EPA) to conduct a follow-up Preliminary Assessment (PA-2) of the Missouri Portland Cement site located at 9403 Riverview Drive in St. Louis, Missouri (Figure 1). FIT members Bob Overfelt, team leader, Eric Worsham, and Jim Alldritt conducted a site reconnaissance to assess site conditions, and provide photographic documentation. Field activities were conducted on September 9, 1988.

SITE DESCRIPTION AND BACKGROUND

The Missouri Portland Cement (St. Louis) site is located in an industrial area north of downtown St. Louis and is adjacent to the Mississippi River. The site consists of two disposal areas: a former quarry located northeast of the plant and an open tract of land south of the facility adjacent to the Mississippi River (MDNR 1981) (Figure 1). The geographic coordinates for the quarry are 38° 44′ 19.3"N latitude and 90° 12′ 40.2" W longitude. The coordinates of the open area are 38° 43′ 49.1" N latitude and 90° 12′ 55.4" W longitude (USGS 1974). The two disposal areas cover approximately 30 acres each (MDNR 1981). Material disposed at the site consisted of raw materials, kiln dust, and used refractory brick that contained chromium. Disposal activities were conducted from 1950 through 1980 (EPA 1981).

According to file information, Missouri Portland Cement submitted a Notification of Hazardous Waste Site to EPA in June 1981. The specific waste at the site was listed as chromium (EPA 1981). No information was provided regarding how the chromium was disposed, or specific concentrations.

In August 1981 the site was listed as a potential hazardous waste site, and a site inspection subsequently was performed by the Missouri Department of Natural Resources (MDNR). According to the inspection report, the potential problem was the used refractory brick which contained unspecified amounts of chromium (MDNR 1981).

The Portland Cement Company collected 12 samples of the refractory brick from the disposal areas, and the samples were submitted to the Randolph and Associates laboratory, Peoria, Illinois, for total metals analysis. The highest chromium level detected was 2.9 milligrams/liter (mg/l) found in a black, HW Jappa type brick. The highest mercury level detected was 0.0002 mg/l, found in a white, APG Jappa type brick. No other metals of concern were found at significant levels (Madros 1989). These chromium and mercury concentrations are well below the EP toxicity values of 5.0 mg/l for chromium and 0.2 mg/l for mercury (CFR 1986). As a result of this sampling the MDNR final strategy determination submitted on February 2, 1982, stated that no further action at the site was anticipated.

The river-front property was sold to the Fruin-Colnon Corporation in 1979 (Steuch 1989). Fruin-Colnon graded the property and constructed a warehouse on the property. The quarry property was sold to the Metropolitan St. Louis Sewer District in 1984 (Steuch 1989). According to Bernie Rains, Director of Environmental Compliance for the Metropolitan St. Louis Sewer District, the old quarry was being used to dispose of incinerator ash from two wastewater treatment plants, and construction rubble from the district's maintenance operations. Jeff Theerman, Plant Superintendent, described the current quarry landfill operation. The portion of the quarry used to dispose of incinerator ash had a one-foot thick clay liner and an under-drain system designed to collect leachate. Leachate is treated at a wastewater treatment plant. The portion of the quarry now used for disposal of construction debris was used by Missouri Portland Cement. No liner or drain system exists in this area.

FIT RECONNAISSANCE OBSERVATIONS

The FIT conducted a walk-through reconnaissance of the site on September 9, 1988. The two disposal areas in the quarry were observed. The section designated for construction waste is located on the east end

of the quarry and is elevated approximately 25 feet above the surrounding topography (Photographs 1 and 2). It appeared that only construction debris was present in this area. The lower, and much larger, area to the west is used for the disposal of incinerator ash. The ash area was much more vegetated, and some concrete culverts were stored in this area (Photographs 2, 3, and 4). A reconnaissance of the riverfront property determined that the land had been graded and seeded, and a warehouse had been constructed. No potential problems were noted.

SUMMARY AND CONCLUSIONS

The Missouri Portland Cement (S. Louis) site consists of two disposal areas both located within 2,000 feet of the inactive cement facility. One area is a former quarry and the other is a disposal area located on the Mississippi River. Portland Cement disposed of raw material waste, kiln dust, and used refractory bricks containing chromium. In 1981 a sampling of the bricks determined that chromium levels were well below the EP toxicity limit for this compound. Portland Cement sold the river front property in 1979 to Fruin-Colnon Corporation. The new owner graded the property and constructed a warehouse. The quarry property is owned by the Metropolitan St. Louis Sewer District and is used for disposal of incinerator ash from wastewater treatment plants and construction debris.

Based on the history of the disposal areas, analytical results from previous sampling, and site reconnaissance observations, all materials existing in the old disposal areas are adequately buried and of low environmental significances; and materials currently being disposed are considered to be non-hazardous.

Attachments: Bibliography
Figure 1: Site Location
Photographs 1 through 4
EPA Form 2070-12

BIBLIOGRAPHY

Code of Federal Regulations, 1986, Section 40 part 261.

EPA Notification of Hazardous Waste Site, June 1981, Robert Hines, Technical Director, Missouri Portland Cement Company.

Madros, John, February 8, 1989, Telephone Conversation Record, Environmental Specialist, Missouri Department of Natural Resources.

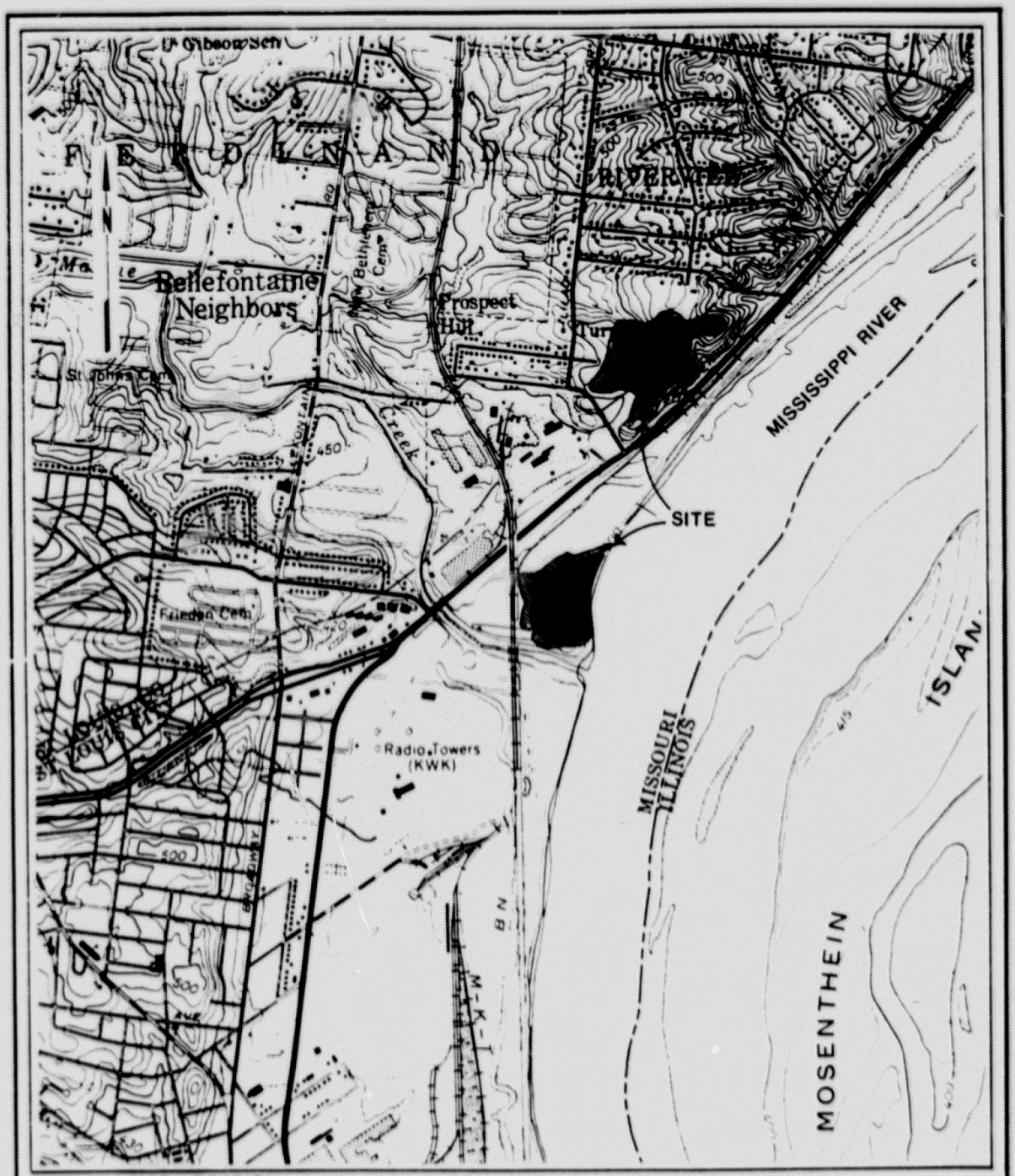
MDNR 1981, Site Inspection Report, Mike Duvall, Environmental Specialist.

Rains, Bernie, February 9, 1989 Telephone Conversation Record, Director of Environmental Compliance, Metropolitan St. Louis Sewer District, St. Louis, Missouri.

Steuch, Hans, February 9, 1989, Telephone Conversation Record, Environmental Engineer, Portland Cement Co., Davenport, Iowa.

Theerman, Jeff February 9, 1989, Telephone Conversation Record, Plant Manager, Metropolitan St. Louis Sewer District, St. Louis, Missouri.

U.S. Geological Survey, USGS, 1974 7.5' Series Topographic Map, Granite City, Ill-MO, Quadrangle Washington, D.C.



MISSOURI PORTLAND CEMENT (ST. LOUIS) SITE
ST. LOUIS, MISSOURI

WASTE SITE TRACKING NO.: MO0717
PREPARED BY: R. OVERFELT

ECOLOGY & ENVIRONMENT FIT FEB. 1989
SOURCE: USGS 7.5' GRANITE CITY, IL. QUAD. 1974

FIGURE 1 : SITE LOCATION MAP

Updated Form

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MO	T300010303

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Missouri Portland Cement (St. Louis)	9403 Riverview Drive

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
St. Louis	MO	63137	St. Louis		

09 COORDINATES	LATITUDE	LONGITUDE
	38° 44' 19.2" N	90° 12' 40.2" W

10 DIRECTIONS TO SITE (Starting from nearest public road)

From Riverview Drive turn northwest into Portland Cement Office Drive. The quarry disposal area is the first road to the northeast. The disposal area adjacent to the Mississippi River can be reached by following service road directly south of the cement facility.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Fruin-Colnon Corp. (Riverfront property) Metropolitan St. Louis Sewer District (Quarry property)	2000 Hampton Riverview Dr.

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
St. Louis	MO	63139	(314) 869-8300 (314) 768-6200

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Missouri Portland Cement (1950 - 1980)	9403 Riverview Drive

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
St. Louis	MO	63137	(314) 867-7423

13 TYPE OF OWNERSHIP (Check one)

X A. PRIVATE ___ B. FEDERAL: _____ (Agency name) ___ C. STATE ___ D. COUNTY ___ E. MUNICIPAL

___ F. OTHER: _____ (Specify) ___ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

___ A. RCRA 3001 DATE RECEIVED: _____ MO/DAY/YR X B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 6-8-81 MO/DAY/YR ___ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

X YES DATE 09/09/88 MO/DAY/YR

___ NO

BY (Check all that apply)

___ A. EPA X B. EPA CONTRACTOR ___ C. STATE ___ D. OTHER CONTRACTOR

___ E. LOCAL HEALTH OFFICIAL ___ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): Ecology and Environment, Inc.

02 SITE STATUS (CHECK ONE)

X A. ACTIVE ___ B. INACTIVE ___ C. UNKNOWN

03 YEARS OF OPERATION

1950 BEGINNING YEAR Present ENDING YEAR ___ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Waste disposed between 1950-1980 by Missouri Portland Cement include waste raw materials, kiln dust and used refractory brick containing low levels of chromium. Currently, only non-hazardous construction wastes are disposed at the site.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Twelve samples of used refractory brick were collected from the site and analyzed for heavy metals. The highest level of chromium found was 2.92 mg/l, therefore, the potential hazard to the environment is low.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous conditions and Incidents)

___ A. HIGH (Inspection required promptly) ___ B. MEDIUM (Inspection required) ___ C. Low (Inspect on time available basis) X D. NONE (No further action needed. Complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Greg Reesor	EPA - Superfund	(913) 236-2856

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Bob Overfelt	FIT	E & E	(913) 432-9961	02/09/89 MO/DAY/YR

EPA FORM 2070-12 (7-81)

souri Portland Cement (St. Louis)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MO	T300010303

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A. SOLID
- ___ B. POWDER, FINES
- ___ C. SLUDGE
- ___ D. OTHER _____ (Specify)
- ___ E. SLURRY
- ___ F. LIQUID
- ___ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS Unknown
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- ___ B. CORROSIVE
- ___ C. RADIOACTIVE
- X D. PERSISTENT
- ___ E. SOLUBLE
- ___ F. INFECTIOUS
- ___ G. FLAMMABLE
- ___ H. IGNITABLE
- ___ I. HIGHLY VOLATILE
- ___ J. EXPLOSIVE
- ___ K. REACTIVE
- ___ L. INCOMPATIBLE
- ___ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		Refractory brick

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Chromium	7440473	landfilled refrac. brick	2.2	mg/l
MES	Mercury	7439976	landfilled refrac. brick	0.0002	mg/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA Superfund files
MDNR Superfund files

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE MO	02 SITE NUMBER T300010303

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 _X_ A. GROUNDWATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) _X_ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

There is a slight potential because the waste is landfilled and is adjacent to the Mississippi River. Ground water is very shallow and if the waste was mobilized, it could potentially enter the ground water.
See comments.

01 _X_ B. SURFACE WATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) _X_ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Because the site is adjacent to the Mississippi River, if the waste became mobile there is a potential for surface water contamination.
See comments.

01 ___ C. CONTAMINATION OF AIR — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known or reported to date

01 ___ D. FIRE/EXPLOSIVE CONDITIONS — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known or reported to date

01 ___ E. DIRECT CONTACT — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known or reported to date

01 ___ F. CONTAMINATION OF SOIL — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

None known or reported to date

01 ___ G. DRINKING WATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known or reported to date

01 ___ H. WORKER EXPOSURE/INJURY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known or reported to date

01 ___ I. POPULATION EXPOSURE/INJURY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known or reported to date

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MO	T3000103 03

II. HAZARDOUS CONDITIONS AND INCIDENTS (CONTINUED)

01 ___J. DAMAGE TO FLORA — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported to date

01 ___K. DAMAGE TO FAUNA — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
None known or reported to date

01 ___L. CONTAMINATION OF FOOD CHAIN — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported to date

01 ___M. UNSTABLE CONTAINMENT OF WASTES — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
None known or reported to date

01 ___N. DAMAGE TO OFFSITE PROPERTY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported to date

01 ___O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported to date

01 ___P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported to date

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

The only known hazardous waste disposed at this site was chromium in refractory brick.. Samples of the brick showed chromium levels to be below RCRA hazardous waste limits. Because the concentrations are low and the mobility is limited when contained in bricks, the potential hazard is low.

V. SOURCES OF INFORMATION (Cite specific references. e.g., state files, sample analysis, reports)

EPA Superfund files
MDNR Superfund files

ECOLOGY & ENVIRONMENT, INC.
PHOTOGRAPHIC RECORD

SITE
MISSOURI PORTLAND CEMENT
ST. LOUIS, MISSOURI

No.: 1
Subject: Edge of construction waste area.

Photographer:
Bob Overfelt

Witness:
Jim Alldritt

Date/Time:
09/09/88
09:30
Direction:
North

No.: 2
Subject:
Construction waste area and concrete culverts.

Photographer:
Bob Overfelt

Witness:
Jim Alldritt

Date/Time:
09/09/88
09:35
Direction:
East

ECOLOGY & ENVIRONMENT, INC.
PHOTOGRAPHIC RECORD

SITE
MISSOURI PORTLAND CEMENT
ST. LOUIS, MISSOURI

No.: 3
Subject:
Incinerator ash area.

Photographer:
Bob Overfelt

Witness:
Jim Alldritt

Date/Time:
09/09/88
09:40
Direction:
Northwest

No.: 4
Subject:
Incinerator ash area.

Photographer:
Bob Overfelt

Witness:
Jim Alldritt

Date/Time:
09/09/88
09:50
Direction:
West

PAN: FMO∅717PA TDD: F-∅7-8808-029 07-1

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 8, 1989 **TIME OF CALL** 1430 hrs

PERSON CONTACTED John Madros

COMPANY MDNR **TITLE** Environmental Specialist

SUBJECT OF CALL Missouri Portland Cement **TELEPHONE #** 314-751-2919

CONVERSATION Mr. Madros researched the MDNR Superfund files at my request. He reviewed the Missouri Portland Cement (St. Louis) file to determine what the data results from a sampling of used refractory brick had shown. Brick were sampled from the landfilled ~~and~~ areas to determine heavy metal content. Twelve samples were collected and analyzed by Randolph and Associates of Peoria, Illinois. The highest chromium was 292 mg/l and was found in a black HW Tappo brick. Another sample showed mercury at .0002 mg/l in a white APG Tappo brick. No other metals of concern were found at significant levels.

Company: Mo Portland Cement
MOT300010303
1.1
2/8/89

SIGNATURE [signature]

DATE 2-8-89

page of

PAN: FMO0817PA F-07-8808-029 07-2

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 9, 1989 **TIME OF CALL** 1130 hrs

PERSON CONTACTED Hans Steuch

COMPANY Portland Cement (Davenport, IA) **TITLE** Environmental Engineer

SUBJECT OF CALL Missouri Portland Cement (St. Louis) Site **TELEPHONE #** 319-383-1624

CONVERSATION Mr. Steuch stated that Portland Cement sold the Missouri Portland Cement (St. Louis) site & quarry property in 1984 to the Metropolitan St. Louis Sewer District and he believed that they use the quarry for disposal of fly ash. He also stated that the river front property was sold to Erwin - Colnon Corp in 1979. Erwin-Colnon graded the property and built a warehouse on the site.

Portland Cement
MOT300010303
2/9/89

SIGNATURE [illegible]

DATE 2-9-89

page of

PAN: FMO0717PA TDD: F-07-8808-029 07-3

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 9, 1989 **TIME OF CALL** 1300 hrs

PERSON CONTACTED Bernie Rains

COMPANY Metropolitan St. Louis Sewer District **TITLE** Director of Environmental Compliance

SUBJECT OF CALL Missouri Portland Cement (St. Louis) Site **TELEPHONE #** 314-436-8711

CONVERSATION Mr Rains told me that the Sewer District owned the old Missouri Portland Cement quarry and that the sewer district used the quarry to dispose of incinerator ash from their sewage treatment plants and also for construction rubble from their maintenance operations.

MO. Portland Cement
MOT 300010303
1.1
[illegible]
2/14/89

SIGNATURE Robert C. [illegible]

DATE [illegible]

page of

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 9, 1989 **TIME OF CALL** 1310 hrs

PERSON CONTACTED Jeff Theerman

COMPANY Metropolitan St. Louis Sewer District **TITLE** Plant Manager

SUBJECT OF CALL Missouri Portland Cement [illegible] site **TELEPHONE #** 314-436-87[illegible]

CONVERSATION Mr. Theerman stated that the old quarry is used to deposit incinerator ash in one portion and that this portion of the quarry had a 1 foot thick clay liner with a under drain system to collect any leachate and treat it at the sewer treatment facility. The other portion is used for construction rubble from their maintenance facilities. This area has no liner and is where Missouri Portland Cement disposed of their waste.

SIGNATURE Robert [illegible]

DATE 2-9-89

PAN: FMO[illegible]717PA TDD: F-07-8808-029 07-5

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 10, 1989 **TIME OF CALL** 1100 hrs

PERSON CONTACTED Terry Scheihing

COMPANY St. Louis Municipal Water Supply **TITLE** Civil Engineer

SUBJECT OF CALL Location of Surface Water intakes for St. Louis **TELEPHONE #** 314-771-4880

CONVERSATION

Mr Scheihing states that the entire St Louis area as well as some surrounding municipalities acquire their drinking water from two surface water intakes. One intake is located on the Missouri River near Chesterfield, MO. The second intake is located on the Mississippi River 1/4 mile south of the I-270 bridge.

100 Portland Cement
MOT300010303
1.1
2/10/89

SIGNATURE [illegible]

DATE [illegible]

Page of

PAN: FMO0717PA TDD: F-07-8808-029 07-6

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 10, 1989 **TIME OF CALL** 1530 hrs.

PERSON CONTACTED John Howland

COMPANY MDNR Planning Section, Water Pollution Control **TITLE** Chief

SUBJECT OF CALL Useage of Mississippi R near St. Louis **TELEPHONE #** 314-751-7143

CONVERSATION

The uses recognized on the Mississippi River from the Alton Dam south to Lock + Dam 26 include boating, fishing, irrigation and industrial use for cooling. There are no intakes for municipalities between St Louis and Cape Girardeau.

Mo Portland Cement
MOT300019303
2/10/89

SIGNATURE Robert Overfelt

DATE 2-10-89

page of

PAN: FM0Ø717PA TDD: F-Ø7-8808-029 07-7

TELEPHONE CONVERSATION RECORD

DATE OF CALL 2-13-89 **TIME OF CALL** 1030 hrs

PERSON CONTACTED Charlie McDaniel

COMPANY Illinois American Water Co **TITLE** Operator

SUBJECT OF CALL Water intake on Mississippi **TELEPHONE #** 618-877-0331

CONVERSATION Mr McDaniel stated that Granite City and other surrounding communities receive their potable water from an intake on the Mississippi River located approximately 5 miles north of Granite City on Chouteau Island.

MD.PortlandCement
[illegible]
Other:
2/13/89

SIGNATURE [illegible signature]

DATE 2-13-89

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PAN: FMO8717PA TDD: F-07-8808-029 07-8

TELEPHONE CONVERSATION RECORD

DATE OF CALL Feb 13, 1989 **TIME OF CALL** 1035 hrs

PERSON CONTACTED Richard Reed

COMPANY Illinois American Water Co. Interurban Dist. **TITLE** Asst. Production Supt.

SUBJECT OF CALL Water intakes on Mississippi River **TELEPHONE #** 618-874-0523

CONVERSATION Mr Reed stated that East St Louis has 1 potable water intake on the Mississippi River. The intake is located approximately 1.5 miles north of the Eads bridge.

MOPOW... Cont
MOT300...0368

2/13/89

SIGNATURE [signature]

DATE 2-13-89

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093-1

ecology and environment, inc.

CLOVERLEAF BUILDING 3, 6405 METCALF, OVERLAND PARK, KANSAS 66202, TEL. 913/432-9961

International Specialists in the Environment

MEMORANDUM

Site: Mo. Portland Cement
ID #: MOT300035103
Break: 1.8
Other: 3/28/89

TO: Pete Culver, RPO

FROM: Bob Overfelt, E & E/FIT

THRU: Philip Dula, AFITOM

DATE: March 28, 1989

SUBJECT: Recommendations and HRS Considerations for the Missouri Portland Cement (St. Louis) Site in St. Louis, Missouri
TDD #F-07-8808-029 PAN #FM00717PA
Site #V31 Project #001
Superfund Contact: Greg Reesor

To fulfill the requirements for the Preliminary Assessment II (PA-2) of the Missouri Portland Cement (St. Louis) Site in St. Louis, Missouri, an on-site reconnaissance and photo documentation were conducted by the FIT. Team members Bob Overfelt, team leader, Jim Alldritt, and Eric Worsham, conducted field activities on September 9, 1988.

The site consists of two disposal areas; a former quarry adjacent to the plant and an open tract of land located on the Mississippi River approximately 1/4 mile south of the plant. In June 1981, Missouri Portland Cement filed a Notification of Hazardous Waste Site form with EPA, listing the specific waste on site as chromium. It was determined that the company disposed raw waste materials, kiln dust, and used refractory brick, which contained chromium. Portland Cement collected 12 samples of the bricks and submitted them for total metals analysis. The highest level of chromium detected was 2.9 mg/l. Because the EP toxicity limit for chromium is 5.0 mg/l, the brick is considered to be non-hazardous.

In 1979 the river-front property was sold. The area land was graded and a warehouse was built on the property. The FIT performed a reconnaissance of this area and found that the area had been graded, seeded and a warehouse constructed. No apparent waste was noted. In 1984 the former quarry area was sold to the Metropolitan St. Louis Sewer District. They have installed a clay liner and leachate collection system under the majority of the quarry. This clay-lined area is currently used to dispose incinerator ash from two wastewater treatment

plants. The remaining quarry area which is unlined, is used to dispose construction debris. The FIT reconnaissance of the quarry area confirmed that this area was currently being used only for disposal of incinerator ash and construction debris.

A two-score scenario HRS evaluation was performed, and draft HRS scores were calculated for this site. The preliminary score was calculated to be 3.86. The projected score, which was calculated assuming releases to ground water and surface water, was 9.57. The air route was not scored because the waste is buried and this migration pathway is not believed to be a concern at this site.

Based on the following information, the FIT recommends that no further Superfund action is warranted at this site.

- The waste is buried;
- Analytical results of past sampling determined that the waste of concern was non-hazardous; and
- The low HRS pre-scores and pro-scores reflect that this site does not pose a significant environmental concern.

FM0Ø717PA

05-1

Site: Portland Cement
ID #: MOT300010303
Break: 1.8
Other:
N/D

REGION VII FIT
HRS EVALUATION WORKSHEET

DRAFT

Site Name: Missouri Portland Cement (St. Louis) City: St. Louis, MO
WST #07_8808-029 Site #V31 CERCLIS #MOT300010303

Major Contaminant(s) Chromium

Scoring Scenarios	Preliminary Score	Projected Score
Ground Water Route (Sgw) =	1.99	4.47
Surface Water Route (Sw) =	6.38	15.94
Air Route (Sa)	0.0	0.0
Total Score (Sm)	3.86	9.57

Potential Releases (Probability)

H M L Nill - Ground Water
H M L Nill - Surface Water
H M L Nill - Air
H M L Nill - On-Site/Direct Contact

HRS-2 Comments

Ground Water Route: The site is adjacent to the Mississippi River. Therefore, ground water is very shallow and there is a slight potential for release. Ground water in the area is not utilized for drinking. All potable water is supplied by surface water intakes.

Surface Water Route: There is a slight potential for a surface water release because the site is adjacent to the Mississippi River. However, the chromium is contained in refractory brick and is buried. Therefore, the potential for the chromium to mobilize is minimal. Also, the nearest potable surface water intake is located approximately 6 miles downstream.

Air Route There is no potential for the chromium to mobilize via the air route. The material is bound in brick and is buried.

On-Site Route: No potential for on-site exposure due to the fact that the material of concern is buried.

Probability to Score above 25.0
[ ] High [ ] Medium [X] Low

Priority For Further Work
[ ] High [ ] Medium [X] NFRAP

DRAFT

Comments

Used refractory brick containing chromium was disposed at this site. Twelve samples were taken of these brick. Analytical results showed chromium levels to be well below the EP Toxicity limit. No other hazardous material is suspected to have been disposed at the site. No further action is recommended.

Date: March 24, 1989